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PATENT ABSTRACTS OF JAPAN(21) Application number: **08220120**(51) Intl. Cl.: **C03B 19/08 C03C 11/00 C08K 3/40**(22) Application date: **21.08.96**

(30) Priority: 28.08.95 JP 07219068	(71) Applicant: ASAHI GLASS CO LTD
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(54) FINE HOLLOW GLASS BALL AND ITS PRODUCTION

(57) Abstract:

PROBLEM TO BE SOLVED: To readily produce fine hollow glass beads having a uniform particle size by subjecting formulated glass raw materials containing a foaming agent to wet milling to form a slurry of fine particles and heating them in the form of liquid drops for vitrification.

SOLUTION: Glass raw materials such as silica sand, soda ash, borax, lime and the like and a foaming agent such as sodium sulfate are mixed to prepare a formulated glass raw materials. This formulated glass raw materials are wet-crushed to prepare of a slurry of a formulated glass raw materials of 3 μ m average particle size. The suitable crusher is made of alumina or zirconia at the liquid contacting with the liquid. Then, the slurry is atomized into liquid particle by spraying, ultrasonic atomization, or centrifugation, heating the liquid particles to effect vitrification and simultaneously

produce fine hollow glass beads. The objective fine hollow glass beads have a particle size of 1-50 μ m, a real density of 0.1-1.5g/cm³, a low specific gravity and is useful as a floatation material for ships.

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